

ELECTRAGEL-100

Cat No. 24-00100
Without timer

Cat No. 24-T0100
With timer

Output range

0-300 V 0-100 mA 0-30 W

- ✓ Four sets of output terminals
- ✓ Can be used in cold room or incubator (-10° C to +50° C)
- ✓ Dual mode (CV & CC) with auto crossover
- ✓ Independent digital displays for mA, volts & timer (resolution 1 mA, 1 V)
- ✓ Output Voltage and Current can be set to any desired value within range
- ✓ Noise and vibration free
- ✓ Light weight Aluminium body with handles provided for portability



Electragel-100
(without timer)

Features of this apparatus

Rugged

- Reduced probability of transistor burnout as MOSFETs with high voltage and current capacity used.
- Instantaneous voltage stabilization, input voltage spikes removed.
- Can be used in low voltage & high current applications
- Large operating temperature range (-10° C to +50° C)

Convenience

- Small foot print due to the low EMI radiation of transformer.
- Voltage, current and timer readings can be viewed simultaneously due to the independent displays
- Four outputs in parallel
- Low heat dissipation, hence can be placed in a cold room or cold cabinet without affecting cabinet temp.

Safety

- No shock from accidental contact with single output due to high insulation between primary and secondary windings of transformers.
- Short circuit proof due to special motherboard design.
- CE certified
- Low EMI radiation

Economical

- Four apparatus of similar resistance can be run simultaneously.
- Reduced maintenance and repairing cost as low probability of burnouts and short circuits
- Less than 10% dissipation of energy as heat
- No moving parts which may need replacements

Ordering description

Electragel-100 (24-00100): DC power supply, range 300 V, 100 mA, 30 W, constant voltage or constant current mode with MOSFETS, autocrossover, four outputs, independent digital displays for mA & V.

Electragel-100 (24-T0100): DC power supply, range 300 V, 100 mA, 30 W, constant voltage or constant current mode with MOSFETS, autocrossover, four outputs, independent digital displays for mA & V, with timer.

Technical specification

Feature	Electragel-100 24-00100	Electragel-100 (with timer) 24-T0100
Voltage Output	0-300V	0-300V
Current output	0-100mA DC	0-100mA DC
Power (wattage)	30 W	30 W
Voltage adjustment	1 V increment via ten turn knob	1 V increment via ten turn knob
Current adjustment	1 mA increment via one turn knob	1 mA increment via one turn knob
Mode of regulation	CVCC with LED indication	CVCC with LED indication
Timer	No	Yes

Timer Display	-	Dual, 3 digit LED display
Time ranges	-	Select between nine time ranges 0 - 9.99/ 99.9/ 999 sec 0 - 9.59 min:sec, 99.9/ 999 min 0 - 9.59 hr:min, 99.9/ 999 hr
Programmable	No	Yes
Auto recovery on power failure Set point stays indefinitely	Yes	Yes
Timer recovery on power failure	-	Yes, memory retention for 10 years
Pause resume function key	Yes	Yes
Operating temperature range	-10°C to +50°C	0°C to +50°C
Voltage input	230V rms, 50 Hz, single phase	230V rms, 50 Hz, single phase
Voltage Variation (from nominal AC input voltage)	+10%, -15%	+10%, -15%
Frequency	47Hz to 53Hz	47Hz to 53Hz
Transient suppression provided	Yes	Yes
Component details		
Mains switch	Illuminated rocker switch	Illuminated rocker switch
Fuse	On front panel	On front panel
Pause/ resume switch	Rocker switch	Rocker switch
Timer ON/ OFF switch	-	Rocker switch
Timer reset switch	-	Push button (momentary)
Output socket	4mm recessed female	4mm recessed female
Mains inlet	IEC C14	IEC C14
Output is fully isolated from input	Yes	Yes
Line regulation in CV mode in CC mode	Better than +/-0.25% +/-0.5%	Better than +/-0.25% +/-0.5%
Load regulation in: - no load to full load variation (in CV mode) - change in zero to max output (in CC mode)	+/-0.25% +/-0.5%	+/-0.25% +/-0.5%
Ripple & noise in CV mode in CC mode	100mV rms max. 20Hz-20MHz 5mA rms max.	100mV rms max. 20Hz-20MHz 5mA rms max.
Automatic overload & short circuit protection with self-recovery	Yes	Yes
3.5 digit voltmeter and ammeter (independent display)	Yes	Yes
Isolation ~ between AC input & DC output terminals ~ between DC output terminals and chassis	2.1KV AC for 1 min 1.5KV AC for 1 min	2.1KV AC for 1 min 1.5KV AC for 1 min
Insulation ~ between output & chassis	> 10Mohms @ 250DC	> 10Mohms @ 250DC
Humidity tolerance	upto 95% (non condensing)	upto 95% (non condensing)
Cooling by normal convection, venting at the bottom and sides	Yes	Yes
Dimensions of the body [measurement excludes projecting knobs, handles and switches]	155 mm (w) x 250 mm (h) x 205 mm (d)	155 mm (w) x 250 mm (h) x 205 mm (d)